

PATENT CLAIMS

1. A method of monitoring the functionability of a brake lining (10, 12), comprising the following steps: measuring a value that characterizes the dielectric constant of the lining material; comparing the measured value with a reference value for the new material; and determining the functionability when the measured value is within a specified tolerance range.

2. A method as claimed in claim 1, characterized in that the characteristic value of the dielectric constant is determined by a static capacitance measurement.

3. A method as claimed in claim 1 or 2, characterized by the further step of performing a conduction measurement.

4. A method as claimed in one of claims 1 to 3, characterized by the further step of providing a brake lining (10, 12) with at least two conductors (34, 36) located in the lining material.

5. A brake lining (10, 12) comprising at least two conductors (34, 36) arranged in the lining material in a way so that the conductors (34, 36) can be used to perform a capacitance measurement.

6. A brake lining (10, 12) as claimed in claim 5, characterized in that the conductors (34, 36) are essentially arranged in a plane which is essentially parallel to the braking surface of the brake lining (10, 12).

7. A brake lining (10, 12) as claimed in claim 5 or 6, characterized in that the conductors (34, 36) are made of a foil material.

8. A brake lining (10, 12) as claimed in one of claims 5 to 7, characterized in that the conductors (34, 36) are imbedded in the brake lining material so that the latter is present on both sides of the conductors (34, 36) in the wear direction of the brake lining (10, 12).

9. A brake (2) comprising a brake lining monitoring device which is constructed so that it can determine the functionality of the brake lining (10, 12) on the basis of a change in the dielectric constant of the brake lining material.

10. A brake (2) as claimed in claim 9, characterized by a brake lining (10, 12) according to one of claims 5 to 8.

11. A brake (2) as claimed in claim 10, characterized in that the brake lining monitoring device comprises a resistance which, in conjunction with the capacitance emitted by the at least two conductors (34, 36) forms an oscillating circuit, and an evaluation circuit for measuring the natural frequency of the oscillating circuit.

12. An elevator installation comprising a brake (2) according to one of claims 9 to 11.